



Powered Subwoofer

Owner's Manual

**AC Sub™ 125, Digital Sub™ 100,
Digital Sub™ 200, Microburst™ & PS Sub™ 225**

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We congratulate and thank you for choosing a PINNACLE® subwoofer. Our subwoofers exemplify the best in modern audio technology, and are designed to produce remarkable amounts of deep bass. Please read this manual completely to ensure the best possible performance from your Home Theater or sound system.

SOLID BRASS ISOLATION CONES:

If your subwoofer comes with Solid Brass Isolation Cones be sure to install them into the bottom of your subwoofer cabinet. They are an important part of the performance of the product and will improve the bass definition. AC Sub™ 125 owners: You *must* install the solid brass isolation cones for the bottom vent to operate properly.

With the cabinet on its side, simply screw the cones into their receptacles on the bottom of the cabinet. Then, with the cabinet upright, adjust the cones individually as needed to level the cabinet. When the cones have been adjusted to the proper height, screw each nut up the threaded shaft flush with the bottom of the cabinet to secure the height setting. If you intend to place your subwoofer on wooden or vinyl floors, we suggest placing a penny under each cone to prevent any indentations.

PLACEMENT:

Recommended Subwoofer Placement:

- a) Within a few inches of the room corner closest to your left or right front speaker (maximum low bass output);
- b) Within a few inches of the wall between your left and right front speakers (strong low bass output with optimal blending to front speakers);
- c) Near any other room corner or wall.

Other locations will provide varying degrees of low bass impact and blending with your front speakers. We recommend listening to your system, with the subwoofer in different room positions, to obtain a location with an optimum response.

A Special Note for Microburst™ owners: Due to the bipole configuration of your subwoofer be sure to leave at least an inch between the rear woofer and your wall.

If you must place your subwoofer near baseboard heaters or forced hot air vents try to leave at least 3" of clearance for proper ventilation. Do not place your subwoofer outdoors, or in any wet or excessively damp environment.

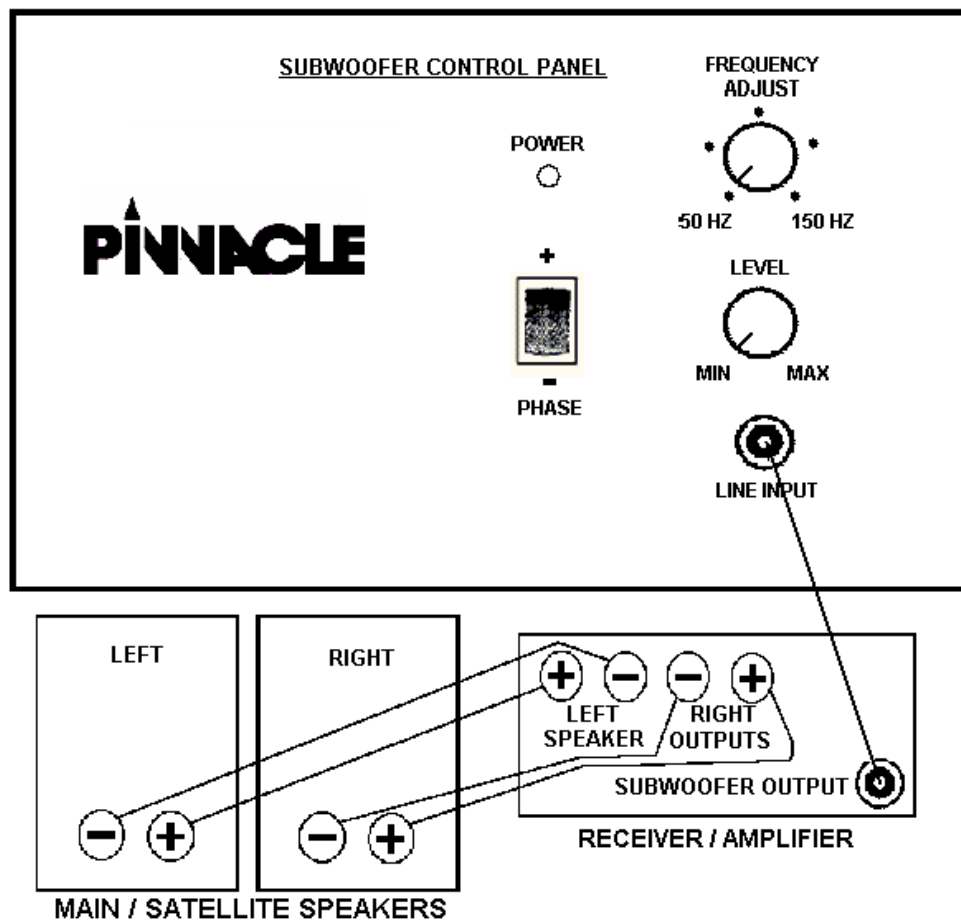
Note: If you have an older, non-flat screen TV, please place your subwoofer far enough away from your TV (approximately 2-3 feet) to avoid any color distortion from being caused by your subwoofer's powerful magnet(s). If you experience picture distortion, simply move the subwoofer away from the TV until the picture becomes distortion free.

We also recommend keeping magnetic media such as audio/videotapes and computer disks at least 2 -3 feet away from your subwoofer to prevent damaging them.

CONNECTIONS:

Complete all wire connections in your Home Theater / sound system before plugging in your subwoofer or turning on your receiver (amplifier).

Connecting Your Subwoofer:



To connect your subwoofer your receiver must have a dedicated "subwoofer output" jack (sometimes called Sub Out, Low Pass or LFE). Simply connect your subwoofer using a standard (coaxially shielded) RCA cable (the same kind of audio cable used to connect your CD, tape deck, etc.) from your receiver's subwoofer output to the input on the subwoofer. Then, wire your left and right front speakers directly to your receiver's speaker outputs. Please refer to the wiring diagram above for further clarification. Note: Do not connect your subwoofer to the tape loop outputs from your receiver as they will overdrive its circuitry!

POWER-UP AND TONE CONTROL ADJUSTMENTS:

- With the VOLUME control at minimum (fully counter-clockwise) plug your subwoofer's power cord into any ordinary wall outlet. The red power indicator LED will stay on as long as the subwoofer is plugged-in. If for any reason you do not want your subwoofer on, simply unplug it.
- Please ensure that your receiver's loudness control is off and that the bass tone control is in its middle (flat or no boost) position. Now play some music with ample bass content. (The following setup routine is best accomplished with one person seated in a normal listening position directing another to adjust the controls for the best sound.)
- Adjust the VOLUME level on the subwoofer's control panel so that the output level of the subwoofer is satisfactory (relative to your front speakers). If either of your front speakers or subwoofer are not functioning properly, please refer to the Troubleshooting section toward the end of this manual.
- Adjust the FREQUENCY ADJUST knob and determine what position sounds best. This feature controls the output level of the mid and upper bass frequencies. Please note that if you have hooked up your subwoofer to a Dolby Digital or DTS receiver via its LFE jack, due to the low pass filter already in the receiver, the subwoofer's frequency adjust control would be best left at the highest frequency (fully clockwise).
- Adjust the PHASE switch on the subwoofer's control panel to determine which position sounds the most natural and powerful. The difference should be most audible in the mid-bass. If you cannot detect a difference, leave the PHASE switch in the + (in-phase) position.
- The best VOLUME level, FREQUENCY ADJUST and PHASE switch positions will mostly be determined by your room acoustics, the mid and upper bass frequency response characteristics of your front speakers, and your personal preferences. The source material will also play a significant role as its bass level and qualities may vary considerably.
- After your initial adjustments you may want to go back and "tweak" these controls. Their effects are acoustically interrelated. Re-adjusting them may be necessary to obtain optimal performance. Generally, once you are satisfied with your subwoofer's settings, you can use your receiver's tone, equalizer, volume and subwoofer output level controls to optimize your whole system's performance.

VERY IMPORTANT!

- If you have a Dolby Pro-Logic Home Theater system, make sure that your receiver's center channel mode is in the **NORMAL** position. This will ensure that all low bass information is sent to your subwoofer.
- If you have a Dolby Digital or DTS Home Theater system, make sure that you have correctly configured your receiver's Bass Management System so that all of your speakers are properly categorized as either **SMALL** or **LARGE**. This will ensure that all appropriate low bass information is sent to your subwoofer. As a general rule, a speaker with an 8" or greater diameter woofer may be considered **LARGE**. Conversely, a speaker with a woofer less than 8" in diameter may be considered **SMALL**. Please note that the bass output of a dual woofer speaker could be comparable to that of a larger single woofer speaker. Example: A dual 6.5" woofer system would generally be considered **LARGE** since its woofer area approximates that of a single 10" woofer system.
- With high volume levels of certain types of signals, your subwoofer may be audibly strained. If you hear the subwoofer "breaking-up" or distorting, turn down the volume level.
- If you have any problems or questions, please contact your PINNACLE[®] dealer for further assistance.

TROUBLESHOOTING:

No Sound only from Subwoofer - Check the subwoofer's volume setting and all connections. If your receiver has a subwoofer on/off or variable subwoofer output level control, ensure that the subwoofer option is turned on and that the output level is at maximum. Ensure that the center channel mode on the receiver is in the NORMAL or SMALL position. Make sure that the subwoofer's RCA cable is connected to the receiver's subwoofer output and not the subwoofer input jack. In the event that the problem persists, refer to the TO OBTAIN SERVICE section of your warranty at the end of this manual.

No Sound only from Left and Right Front Speakers - Check all connections. Ensure that your receiver's speaker channel A or B is switched on.

Too Little Bass - Check: subwoofer volume/frequency/phase control positions; receiver tone controls; program material; ensure that the center channel mode on the receiver is in the NORMAL or SMALL position. If your receiver has a variable subwoofer output level control, ensure that the output level is at maximum. Try moving the subwoofer further into a corner or towards the wall.

Too Much Bass - Check: subwoofer volume/frequency/phase control positions; receiver bass/loudness controls; program material; move subwoofer further out of corner or away from wall.

Hum: Check for faulty phono connecting cable. Try to separate phono cables from power cords (they can induce hum into the system). If that doesn't work we recommend you turn off your subwoofer when it is not in use. This is most easily accomplished by either connecting its powercord to a switched power outlet on the back of your receiver (if it has them) or by using a Remote Controlled Switched Outlet like Radio Shack part #61-2667.

AC Sub™ 125, Digital Sub™ 100, Digital Sub™ 200, Microburst™ & PS Sub™ 225 Specifications:

AC Sub 125 & Digital Sub 100: (1) 10" heavyweight fibercone woofer with 1 1/2" voice coil & 26 oz magnet

Microburst: (2) 6.5" heavyweight fibercone woofers with 2" voice coils and 30 oz magnets

Digital Sub 200 & PS Sub 225: (1) 12" heavyweight polycone woofer with 1 1/2" voice coil and 20 oz magnet

Low End Frequency Response: AC Sub 125 & Digital Sub 100: - 3 dB @ 33 Hz

Microburst: - 3 dB @ 32 Hz

Digital Sub 200 & PS Sub 225: - 3 dB @ 30 Hz

Variable Subwoofer Low Pass Filter: Third Order from 50 - 150 Hz

System: AC Sub 125 - 4th Order Bottom Vented

Digital Sub 100 - Acoustic Suspension

Microburst - Bipole, Acoustic Suspension

Digital Sub 200 & PS Sub 225 - 4th Order Rear Vented

Dimensions: AC Sub 125 & Digital Sub 100: 13" Wide x 14 5/16" High x 14 1/2" Deep

Microburst: 10 1/4" Wide x 9 1/16" High x 11 1/8" Deep

Digital Sub 200 & PS Sub 225: 14 1/4" Wide x 15" High x 15 3/4" Deep

Weight: AC Sub 125 & Digital Sub 100 - 22 lbs. / Microburst - 25 lbs. / Digital Sub 200 & PS Sub 225 - 36 lbs.

Amplifier Type: Class A/B amplifier

Power Requirements: AC 120 V, 60 Hz

Operating Temperature Range: 50° to 104° F (10° to 40° C)

LIMITED WARRANTY:

What Is Covered

Your Pinnacle® subwoofer features a limited warranty as follows. The subwoofer driver and all assembly and construction aspects are covered by this warranty for a period of seven (7) years from the date of original purchase. Your subwoofer amplifier is covered by this warranty for a period of two (2) year from the date of original purchase. The warranty covers all necessary parts and labor to return the subwoofer to proper working order. Cabinet surfaces, grille assembly, and other exterior parts subject to normal wear and tear are not covered except where an inherent structural defect becomes evident.

Parts replacement and labor will be performed at the discretion of Pinnacle Loudspeakers and will be provided free of charge unless (in the opinion of our service department, service representatives, or engineering department) the system has failed due to abuse or negligent operation.

What Is Not Covered

This warranty will be void and no free services performed if we or any party acting as our agent determines that the system has had any of its elements (amplifier, woofer, etc.) removed or tampered with in any way whatsoever. Furthermore, if your subwoofer is not found to be defective a service charge will be levied. In either case the minimum charge will be \$30.00. An additional charge will be applicable for same day service where possible and this charge will always be in effect even if the actual parts and labor are covered by this warranty. Pinnacle Loudspeakers reserves the right to make the final determination of whether or not the system has been damaged by abuse or negligent operation.

To Obtain Service

To obtain service under this warranty, either contact your Pinnacle® dealer or us directly at (516) 576-9052 or service@pinnaclespeakers.com. If you ship your subwoofer you are responsible for packing and shipping insurance. The freight must be prepaid. We will, however, pay return freight charges on any returned subwoofer that qualifies for in-warranty service. Sorry, we cannot accept any collect freight charges. You must include a note, attached to the unit, with your name, phone number or email address, and return shipping address (no Post Office boxes), indicating the nature of the problem you are experiencing. For warranty service you must also include a copy of your sales receipt. YOU MUST FIRST CONTACT US FOR THE CUSTOMER SERVICE SHIPPING ADDRESS IN YOUR AREA IF YOUR DEALER IS NOT EQUIPPED FOR THIS SERVICE. Please be sure to pack any items you ship us carefully since we cannot be held responsible for damages incurred during shipping.

This warranty may be transferred to a subsequent owner.

SAVE YOUR ORIGINAL SHIPPING CARTON AND PACKING MATERIALS, AS WELL AS THIS WARRANTY AND YOUR SALES RECEIPT. YOU WILL NEED THEM TO OBTAIN SERVICE UNDER THE PROVISIONS OF THIS LIMITED WARRANTY.



1 Fairchild Court Suite 140
Plainview, NY 11803

Tel. (516) 576 9052, Fax. (516) 576 0826
E-mail: pinnacle@pinnaclespeakers.com
Website: [Http://www.pinnaclespeakers.com](http://www.pinnaclespeakers.com)

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